

Solar System Satellite Formation : an overview

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The origin of Solar System satellites is actively debated. We know understand that, despite the morphological analogy between a satellite system and a planetary system, the formation processes of satellites may be significantly different from planetary formation processes. in addition, satellites evolve quickly under the effects of tides. Different scenarios seem to be required for different types of planets (terrestrial, giant or ice giant). In this talk I will current satellite formation models and the different constrains. Based on Cassini images and numerical simulation, I will show that there is today on-going accretion processes at the edge of Saturn's rings, pointing to a new satellite formation process.

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